REMARKS

Reconsideration of the above-identified patent application, as amended, is respectfully requested.

Independent claims 11 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yasuhiro Nakamura et al., *A Unified Coding Method of Dithered Image and Text Data Using Miropattems* (Nakamura et al.). Dependent claims 12-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. in view of U.S. Patent No. 5,970,140 to Sandford II et al., dependent claims 14-18 and 26-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. in view of U.S. Patent No. 5,195,136 to Hardy et al., and dependent claims 28-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. in view of European Patent Application No. EP 0 359 325 A1 to N.V. Phillips. For at least the following reasons, applicants traverse these rejections.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference, and the identical invention must be shown in as complete detail as is contained in the claim. (MPEP § 2131). Contrary to the Examiner's statement that all elements of claims 11 and 25 are disclosed in the Nakamura et al. reference, this is simply not the case. Rather, each element of applicant's claims 11 and 25 is not disclosed in the Nakamura et al. reference, and the 35 U.S.C. § 102(b) rejection of claims 11 and 15 is therefore unsupported by the cited reference and should be withdrawn.

For example, each of claims 11 and 25 require a step, or apparatus, for generating an encryption sequence based on an encryption or encrypting key. At page 9, lines 15-18, of applicants' specification, applicants clearly describe with reference to applicants' FIG. 4 that the encryption sequence (86) is generated based on the encryption key (70), and at page 9, lines 22-24 and page 10, lines 17-18 of applicants' specification, it is clearly described that the encryption sequence (86) is used subsequently to encrypt the message (88) via an encrypter (90).

Nakamura et al. fail to show or disclose any such step or apparatus. Rather, while Nakamura et al. show and describe with respect to FIG. 7 that the "text" and the "image" are encrypted by the "encryption" block, Nakamura et al. do not show or disclose generation of an encryption sequence based on the encryption key, as required by applicants' claim 1, or an encryption sequence generator configured to generate an encryption sequence based on an encrypting key, as required by applicants' claim 25, wherein such an encryption sequence is subsequently used to encrypt the "text" prior to embedding the encrypted text into the "image". Lacking any such disclosure by Nakamura et al, the § 102(b) rejection of claims 11 and 15 is accordingly improper and should be withdrawn. Claims 12-18 depend from claim11 and claims 26-29 depend from claim 25, and for the same reasons given hereinabove, the § 103(a) rejections of claims 12-18 and 26-29 should be withdrawn.

Independent claim 23 stands rejected under 35 U.S.C. § 102(a) as being anticipated by Podilchuk et al., *Digital image watermarking using visual models*

(Podilchuk et al.). Dependent claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Podilchuk et al. in view of Nakamura et al. For at least the following reasons, applicants traverse these rejections.

Contrary to the requirements of anticipation under 35 U.S.C. § 102(a), each element of applicant's claim 23 is not disclosed in the Podilchuk et al. reference, and the § 102(a) rejection should therefore be withdrawn. For example, Podilchuk et al. disclose only a technique for encoding watermarks and a technique for decoding watermarks, and lack any disclosure relating a method of using any such encoding and decoding techniques for exchanging data hidden in a carrier signal between different sending and receiving locations. In contrast, applicants' claimed invention requires sending the signal including the hidden data to a receiving location where the message is extracted from the signal including the hidden data. Podilchuk et al. neither show nor disclose such a limitation, and the 35 U.S.C. § 102(a) rejection of claim 23 is therefore unsupported by the cited reference and should be withdrawn. Claim 24 depends from claim 23, and for the same reasons given hereinabove, the § 103(a) rejection of claim 24 should be withdrawn.

Claims 1-3, 6-9 and 19-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over European Patent Application No. EP 0 359 325 A1 ('325) in view of Nakamura et al, claims 4-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over '325 in view of Nakamura et al. and further in view of U.S. Patent No. 5,970,140 to Sandford II et al., and claim 10 stands rejected under 35 U.S.C. § 103(a)

as being unpatentable over '325 in view of Nakamura et al. and further in view of Schneier.

In rejecting claim 1, the Examiner relies on Nakamura et al. for "implicitly" teaching an encrypting sequence. Consistent with claims 11 and 25 discussed hereinabove, applicants have amended the step of providing an encrypting key in claim 1 to recite generating an encrypting sequence based on the encrypting key, and claim 7 has also been amended to remove this limitation to avoid redundancy. Thus, for the same reasons discussed hereinabove with respect to the rejection of claims 11 and 25, amended claims 1-10 are likewise believed to be allowable.

Regarding claim 19, none of the cited references show, disclose, teach or suggest embedding an encrypted message into a first portion of a carrier signal and embedding message extraction information into a second portion of the carrier signal. The examiner cites EP '325 as implicitly teaching the embedding of message extraction information into a second portion of the carrier signal because EP '325 discloses that information can be recovered from a transmitted signal by subjecting portions of the transmitted signal to an Exclusive OR operation. Applicants respectfully disagree with the Examiner's reasoning, and point out that a well-known general logic operation applied to any transmitted signal is not the same as embedding message extraction information into a portion of a carrier signal. Nothing in EP '325 teaches, suggests or even implies embedding message extraction information into a portion of a carrier signal

as required by applicants' claim 19. As such, the § 103(a) rejection of claims 19-2 is therefore improper and should be withdrawn.

Claims 1 and 7 have been amended and all claim rejections have been traversed. Claims 1-29 are now believed to be in condition for allowance, and such action is solicited. The Examiner is cordially invited to contact the undersigned by telephone to discuss any unresolved matters.

Respectfully submitted,

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